

CLAIMS

1. A security intrusion mitigation method comprising:
utilizing network spanning tree configuration information to determine an
5 action for mitigating diffusion of intrusive attacks, wherein said spanning tree
information includes an indication of an internal diffusion risks; and
performing said action for mitigating diffusion of intrusive attacks
automatically, wherein said action for mitigating includes compensation for functional
support of prioritized applications.
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2. A security intrusion mitigation method of Claim 1 further comprising utilizing
said internal diffusion risk values to determine components forming a path in said
spanning tree configuration with a highest cumulative diffusion impact risk.
- 15 3. A security intrusion mitigation method of Claim 1 wherein said internal
diffusion risk includes an asset value factor.
4. A security intrusion mitigation method of Claim 3 wherein said asset value
corresponds to an economic impact of a disruption to functionality provided by a
20 network component.
5. A security intrusion mitigation method of Claim 1 wherein said internal
diffusion risk includes an exposure rating factor.

6. A security intrusion mitigation method of Claim 5 wherein said exposure rating defines a threshold value corresponding to connectivity of a network component with other network components.
- 5 7. A security intrusion mitigation method of Claim 5 wherein said network component is assigned an exposure rating value based upon a connectivity distance from a root node.
8. A security intrusion mitigation method of Claim 5 wherein said action for
10 mitigating diffusion of intrusive attacks is implemented in accordance with a highest risk algorithm.
9. A security intrusion mitigation method of Claim 5 wherein said network spanning tree configuration information includes information associated with
15 components included in a utility data center and said mitigation action is implemented in said utility data center.
10. A security intrusion mitigation system comprising:
a means for communicating information;
20 a means for processing said information including instructions for determining a highest risk path and automatically mitigating an attack spread to components included in said highest risk path; and
a means for storing said information, including instructions determining a
highest risk path and automatically mitigating an attack spread to components
25 included in said highest risk path.

11. A security intrusion mitigation system of claim 10 wherein said instructions include security management instructions implemented on a network application management platform.

5 12. A security intrusion mitigation system of claim 10 further comprising a means for interfacing with a network application management platform.

13. A security intrusion mitigation system of claim 10 wherein said instructions include attack spread risk determination instructions.

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14. A security intrusion mitigation system of claim 10 further comprising a means for centrally controlling a utility data center operations.

15. A computer usable storage medium having computer readable program code embodied therein for causing a computer system to implement security intrusion mitigation instructions comprising:

a component risk determination module for determining a risk of an attack spreading from a first component to a second component included in a network; and
an attack spreading response module for responding to said risk of an attack
20 spreading from a first component to a second component included in said network.

16. A computer usable storage medium of Claim 15 wherein said risk is biased based upon an economic value of functions said second component performs.

25 17. A computer usable storage medium of Claim 15 said risk is biased based upon connectivity of said second component to said first component in said network.

18. A computer usable storage medium of Claim 17 wherein said response includes reducing traffic communication to said second component.

5 19. A computer usable storage medium of Claim 15 wherein said response includes turning off an interface of said second component to said network.

20. A computer readable medium of Claim 19 wherein said response is performed in accordance with an highest risk analysis.

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